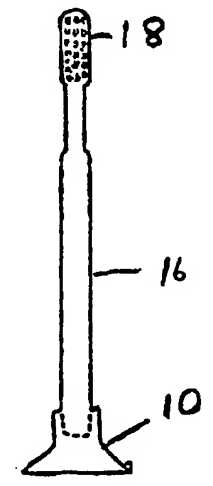


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INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<p>(51) International Patent Classification ⁵ : A47K 1/09</p>	<p>A1</p>	<p>(11) International Publication Number: WO 94/20006 (43) International Publication Date: 15 September 1994 (15.09.94)</p>
<p>(21) International Application Number: PCT/GB94/00413 (22) International Filing Date: 3 March 1994 (03.03.94) (30) Priority Data: 9304753.8 9 March 1993 (09.03.93) GB (71)(72) Applicant and Inventor: BRADLEY, Gavin, Giffard, Lloyd [IE/GB]; 10 Dovedale Gardens, 465 Battersea Park Road, London SW11 4LR (GB).</p>		<p>(81) Designated States: AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, KZ, LK, LU, LV, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA, US, UZ, VN, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).</p> <p>Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i></p>
<p>(54) Title: SUCTION HELD BATHROOM UTENSILS</p> <p style="text-align: center;">TOOTHBRUSH</p> <div style="text-align: center;"></div> <p>(57) Abstract</p> <p>Bathroom utensils (e.g. toothbrushes (16, 18), disposable and non-disposable wet razors (26, 28) and shaving brushes (36, 38) <i>inter alia</i>) have bodies which can be affixed (or cemented) to custom-designed and moulded suction pads (10, 20, 38). A bathroom utensil having such a suction pad can be firmly attached, by suction, at a convenient position on a smooth, non-porous bathroom surface, until required for use, and will be held by the suction pad in a suitable position, for example one in which the head (18) of the utensil is held clear of any surface.</p>		

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DESCRIPTION OF INVENTION

Title: "Suction held bathroom utensils"

THIS INVENTION relates to bathroom utensils (e.g. toothbrushes, disposable and non-disposable wet razors and shaving brushes *inter alia*).

Bathroom utensils are principally for individual personal usage. However, in the bathroom, bathroom utensils are easily mixed-up, may be difficult to find and are often left lying unhygienically. Lack of careful attention to the hygienic storage of personal bathroom utensils increases the risk of spreading bacterial infections.

It is an object of the invention to provide a bathroom utensil which can be securely but detachably fixed to a bathroom surface in a predetermined orientation and thereby stored simply, reliably and hygienically.

According to the invention, there is provided a bathroom utensil including a suction device whereby the utensil may be attached to a smooth non-porous flat surface to be supported in a predetermined orientation relative to that surface.

Embodiments of the invention are described below by way of example with reference to the accompanying drawings, in which:-

FIGURE 1 is a side elevation view of a suction device (suction pad),

FIGURE 2 is an elevation view of a utensil embodying the invention, in the form of a toothbrush,

FIGURE 3 is an elevation view of a razor embodying the invention, and

FIGURE 4 is an elevation view of a shaving brush embodying the invention.

Referring to Figure 1, a suction pad 10 comprises a circular peripherally flexible downwardly concave base 12 with an integral central stud 14 having an upwardly open recess therein. The suction pad is formed from an elastomeric material such as rubber or resilient plastics. Suction pads of this general form are, of course, well known.

Referring to Figure 2, a toothbrush embodying the invention comprises, in conventional fashion, an elongate handle 16 from one end of which extends a neck carrying a head 18. The opposite end of the handle 16 is received in the recess in the central stud 14 of the suction pad 10 of Figure 1, this recess and the toothbrush end being made of complementary form so that the toothbrush handle is firmly held in the stud 14.

Accordingly, after the toothbrush has been used, it can be parked on a convenient flat smooth non-porous bathroom surface, for example a glass, marble or ceramic surface such as a tiled surface or a glass shelf, simply by engaging the concave surface of the suction pad against such surface and pressing against that surface via the handle 16, so that the suction pad 10 is retained by suction and holds the toothbrush in a position in which its handle extends perpendicularly from that surface, with the

head 18 out of contact with such surface. When required, the toothbrush, with its suction pad, can be readily pulled from said surface.

Figure 3 shows a safety razor comprising a head 28 at one end of a handle 26 the other end of which is likewise secured to the central stud of a suction pad 20 similar to the pad 10 but having its central stud 14 and the recess therein appropriately configured to receive the complementary lower end of handle 26.

Figure 4 shows a shaving brush, with a handle 36, bristles 38 extending upwardly from the handle 36 and a suction pad 30 secured to its lower end. The suction pad 30 is similar in form and composition to the suction pads 20 and 10 of Figures 3 and 2 but is again adapted to the handle of the utensil concerned. Thus, the central stud of the pad 30 is of substantially greater diameter than those of pads 10 and 20 to receive a retaining formation of only slightly smaller diameter at the lower end of handle 36. As shown, the circumferential wall of this retaining formation is tapered inwardly and upwardly and the circumferential wall of the recess in the central stud is likewise inclined inwardly and upwardly (effectively undercut) so that the retaining formation is held captive in the recess. It will be appreciated that the recesses in the central studs of the pads 10 and 20 of Figures 2 and 3, and the lower end parts of the respective handles 16, 26, may be similarly configured. Such an arrangement allows the respective handles to be removed from and replaced in their suction pads, for example for replacement of the brush, razor or the like and/or the suction pad. Alternatively, the handles may be cemented into the recesses in the central studs of their suction pads.

It will be appreciated, of course, that instead of the utensil handle ends fitting in recesses in their suction pads, the respective handle ends could be formed with recesses to receive central studs or projections of complementary configuration, of the respective suction pads.

It will also be appreciated that the suction pad may be arranged to hold the respective utensil in some other orientation, e.g. with its handle extending other than perpendicularly with respect to the surface to which the suction pad is applied, for example with such handle extending parallel with such surface or at an angle with respect to such surface.

CLAIMS

1. A bathroom utensil including a suction device whereby the utensil may be attached to a smooth non-porous flat surface to be supported in a predetermined orientation relative to that surface.
2. A utensil according to claim 1 wherein the utensil comprises a handle with an operative part or head at one end and having said suction device secured to the other end, whereby the utensil may be attached to such smooth flat surface with said head clear of said surface.
3. A bathroom utensil substantially as hereinbefore described with reference to, and as shown in, the accompanying drawings.

FIGURE : 1 PLASTIC SUCTION DEVICE

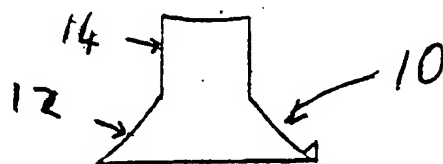
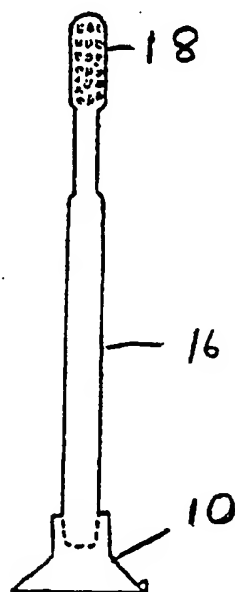


FIGURE : 2 TOOTHBRUSH



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FIGURE : 3 DISPOSABLE / NON-DISPOSABLE RAZOR

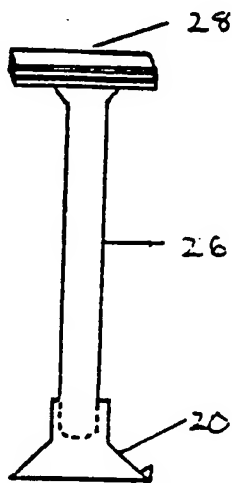
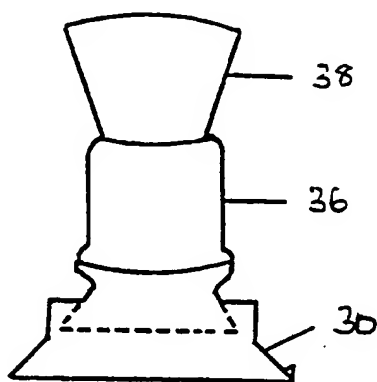


FIGURE : 4 SHAVING BRUSH



INTERNATIONAL SEARCH REPORT

International application No

PCT/GB 94/00413

A. CLASSIFICATION OF SUBJECT MATTER
IPC 5 A47K1/09

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 5 A47K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US,A,4 158 413 (BRIGGS) 19 June 1979 see column 1, line 18 - line 21; figures 1,2	1,3
Y	---	2
Y	CH,A,475 751 (FERRARI) 31 July 1969 see figures 1-5	2
X	US,A,5 028 026 (PHILIPPS ET AL.) 2 July 1991 see abstract; figure 1	1
A	DE,A,26 46 265 (RICHTER) 13 April 1978 see page 2; figure 1	1,2

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5 July 1994

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09. 08. 94

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Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US-A-4158413	19-06-79	NONE	
CH-A-475751	31-07-69	NONE	
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